

### What Is Claimed Is:

1. A computer implemented method of enabling an object-oriented application to access in an object-oriented manner a procedural operating system having a native procedural interface during run-time execution of the application in a computer having a memory component, the method comprising the steps of:
  - (a) locating in the application an object-oriented statement which accesses a service provided by the operating system;
  - (b) translating the object-oriented statement to a procedural function call compatible with the native procedural interface of the operating system and corresponding to the object-oriented statement; and
  - (c) executing in the computer the procedural function call to thereby cause the operating system to provide the service on behalf of the application.
2. The method of claim 1 in which an object-oriented class library includes related object-oriented classes having class methods for accessing services provided by the operating system using procedural function calls compatible with the native procedural interface of the operating system, wherein the object-oriented statement located in the application is defined by the class library, further comprising the step of storing in the memory component a code library comprising computer program logic implementing the object-oriented class library.
3. The method of claim 2, wherein step (b) comprises the steps of identifying one or more methods in the class library corresponding the object-oriented statement, and copying the identified methods to a portion of virtual memory in the computer previously allocated to the application, and wherein step (c) comprises the step of executing the identified methods.

- 1 4. An apparatus for enabling an object-oriented application to access in an object-oriented  
2 manner a procedural operating system having a native procedural interface, the apparatus  
3 comprising:
- 4 (a) a computer;
  - 5 (b) a memory component in the computer;
  - 6 (c) a code library, stored in the memory component, comprising computer program logic  
7 implementing an object-oriented class library, the object-oriented class library  
8 comprising related object-oriented classes for enabling the application to access in an  
9 object-oriented manner services provided by the operating system, the object-oriented  
10 classes comprising methods for accessing the operating system services using procedural  
11 function calls compatible with the native procedural interface of the operating system;  
12 and
  - 13 (d) means, in the computer, for processing object-oriented statements contained in the  
14 application and defined by the class library by executing methods from the class library  
15 corresponding to the object-oriented statement.
- 1 5. The apparatus of claim 4, wherein the means for processing the object-oriented  
2 statements operates in the computer during run-time execution of the application.

- 1 6. A computer implemented method of enabling an object-oriented application to access in  
2 an object-oriented manner a procedural operating system having a native procedural  
3 interface during run-time execution of the application in a computer having a memory  
4 component, in which an object-oriented class library comprises related object-oriented  
5 classes having class methods for accessing services offered by the operating system using  
6 procedural function calls compatible with the native procedural interface of the operating  
7 system, the application including object-oriented statements defined by the class library  
8 to access the operating system services, the method comprising the steps of:
- 9 (a) storing in the memory component a code library comprising computer program logic  
10 implementing the object-oriented class library; and
- 11 (b) processing the object-oriented application in the computer by executing methods from the  
12 class library corresponding to the object-oriented statements in the application.

1 7. An apparatus for providing an object-oriented interface to a procedural operating system  
2 having a native procedural interface, the apparatus comprising:  
3 (a) a computer;  
4 (b) a memory component in the computer; and  
5 (c) a code library, stored in the memory component, comprising computer program logic  
6 implementing an object-oriented class library, the object-oriented class library  
7 comprising related object-oriented classes for enabling an object-oriented application to  
8 access in an object-oriented manner services provided by the operating system, the  
9 object-oriented classes comprising methods for accessing the operating system services  
10 using procedural function calls compatible with the native procedural interface of the  
11 operating system; wherein object-oriented statements defined by the object-oriented class  
12 library are insertable into the application to enable the application to access in an object-  
13 oriented manner the operating system services during run-time execution of the  
14 application in the computer.

- 1 8. A computer program product, adapted for use with a computer comprising a procedural  
2 operating system having a native procedural interface, the computer program product  
3 comprising:
- 4 (a) a storage medium readable by the computer; and  
5 (b) a code library, stored in the storage medium, comprising computer program logic  
6 implementing an object-oriented class library, the object-oriented class library  
7 comprising object-oriented classes for enabling an object-oriented application to access in  
8 an object-oriented manner services provided by the operating system, the object-oriented  
9 classes comprising methods for accessing the operating system services using procedural  
10 function calls compatible with the native procedural interface of the operating system;  
11 (c) wherein object-oriented statements defined by the object-oriented class library are  
12 insertable into the application to enable the application to access in an object-oriented  
13 manner the operating system services during run-time execution of the application in the  
14 computer.
- 1 9. A computer implemented method of enabling a procedural application to access in a  
2 procedural manner an object-oriented operating system having a native object-oriented  
3 interface during run-time execution of the application in a computer, the method  
4 comprising the steps of:
- 5 (a) locating in the application a procedural statement which accesses a service provided by  
6 the operating system;  
7 (b) translating the statement to an object-oriented function call compatible with the native  
8 object-oriented interface of the operating system and corresponding to the procedural  
9 statement; and  
10 (c) executing in the computer the object-oriented function call to thereby cause the operating  
11 system to provide the service on behalf of the application.